



22W

PATENT  
ATTORNEY DOCKET NO. 041465-5196

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
	)	
Mitsuo YASHUSHI, et al.	)	Confirmation No.: 8263
	)	
Application No.: 10/647,589	)	Group Art Unit: 3736
	)	
Filed: August 26, 2003	)	Examiner: Unassigned
	)	
For: APPARATUS AND METHOD FOR	)	
ANALYZING HEART-RATE	)	
VARIABILITY BASED ON	)	
ELECTROCARDIOGRAM	)	
INFORMATION	)	

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO Form 1449. To the best of the undersigned's knowledge, this Information Disclosure Statement is being before the mailing date of a first Office Action on the merits for the above-referenced application, and no fees are believed to be necessary.

A copy of each of the listed documents is attached for the Examiner's convenience. Applicants respectfully request that the Examiner consider the listed documents and evidence that consideration by making the appropriate notations on the attached PTO Form 1449.

Each item of information contained in this Information Disclosure Statement (IDS) was cited in an European Search Report dated April 12, 2005 in European Application No. EP 03 25 495. A copy of the European Search Report is enclosed for the Examiner's consideration.

This submission does not represent that any better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "Prior Art." If it should be determined that any of the listed documents do not constitute "Prior Art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 50-0310.

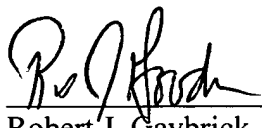
Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

Dated: April 26, 2005

**CUSTOMER NO. 009629**  
**MORGAN, LEWIS & BOCKIUS LLP**  
1111 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
Tel: 202.739.3000  
Fax: 202.739.3100

By:

  
Robert J. Gaybrick  
Registration No. 27,890

Robert J. Gould  
Reg. No. 41,040

**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

PTO Form 1449

PAGE 1 of 1

Attorney Docket No.:  
041465-5196

Application No.: 10/647,589

Applicant: Mitsuo YASHUSHI, et al.

Filing Date: August 26, 2003

Group Art Unit: 3736

**U.S. PATENT DOCUMENTS**

*Examiner Initial		Document Number	Date	Name	Class	Sub Class	Filing Date
	A1						

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Name	Class	Sub Class	<u>Translation</u> YES NO	
	B1							X
								X

**NON-PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

C1	K. Han, J.H. Nagel, B.E. Hurwitz and N. Schneiderman, "Decomposition of Heart Rate Variability by Adaptive Filtering for Estimation of Cardiac Vagal Tone", <u>Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society</u> , Orlando, FL, U.S., Oct. 31-Nov. 3, 1991, New York, IEEE, US, Vol. 13, No. 2 (Oct. 31, 1991), pp. 660-661, XP000348278.
C2	Shaw-Jyh Shin, Walter N. Tapp, Stanley S. Reisman, Member, IEEE, and Benjamin H. Natelson, "Assessment of Autonomic Regulation of Heart Rate Variability by the Method of Complex Demodulation", <u>IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING</u> , New York, NY, U.S., Vol. 36, No. 2 (Feb. 1989), XP000009587, pp. 274-283.
C3	L. Zhao, S. Reisman, T. Findley, "Derivation of Respiration from Electrocardiogram during Heart Rate Variability Studies", <u>Computers in Cardiology</u> (1994), pp. 53-56, XP-002322495.
C4	Task Force of the European Society of Cardiology and the North American Society of Pacing and Electrophysiology, Special Report, "Heart Rate Variability Standards of Measurement, Physiological Interpretation and Clinical Use", pp. 1043-1065, XP002236874.
C5	Gary G. Berntson, J. Thomas Bigger, Jr., Dwain L. Eckberg, Paul Grossman, Peter G. Kaufmann, Marek Malik, Haikady N. Nagaraja, Stephen W. Porges, J. Philip Saul, Peter H. Stone, and Maurits W. Van Der Molen, Committee Report, "Heart rate variability: Origins, methods, and interpretive caveats", <u>Psychophysiology</u> , Cambridge University Press, U.S.A., Vol. 34 (1997), pp. 623-648, XP009045636.

Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.